

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A method for capturing at least one image of an existing man-made structure and for detecting the presence of failure(s) in such existing man-made structures comprising:

(a) separately providing a detectable material on a surface ~~or in an existing man-made structure~~ so that portions of the detectable material will be present in the failure(s) of the existing man-made structure that accentuates the failure, wherein the detectable material is separately applied, after forming the surface ~~or the~~ as a man-made structure;

(b) providing an image sensor which captures at least one image of the existing man-made structure and identifies failure(s) due to the existence of the detectable material in the failure(s) to provide at least one digital image; and

(c) processing the captured digital image(s) to provide a visual image of the existing man-made structure to determine the presence of failure(s) in the existing man-made structure;

wherein the digital image(s) is captured by a capture device which is located in an aircraft or satellite.

2. (Canceled)

3. (Original) The method of claim 1 wherein the digital image processing includes comparing previously captured digital images with newly captured digital image(s) to determine variations in the captured digital image(s) at predetermined coordinates which indicate a potential failure in the existing man-made structure.

4. (Canceled)

5. (Original) The method of claim 3 wherein the image processing includes storing in memory a representation of different failures to be detected and comparing the captured digital image with the failures to determine the presence of a failure, and location of such failure.

6. (Currently Amended) The method of claim 1 wherein the detectable material interacts with incident radiation emitted from an aircraft or satellite to cause radiation from the failure in the existing man-made structure to be detected by the image sensor.

7. (Original) The method of claim 6 wherein the detectable material includes encapsulated dyes or phosphors.

8. (Original) The method of claim 6 wherein the detectable material is included in a liquid solution or solid solution which is distributed on the failure in the existing man-made structure.

9. (Original) The method of claim 6 wherein the detectable material is a lanthanide, and wherein the lanthanide is combined with halogen elements to form a detectable halide.

10. (Previously Presented) The method in claim 6 wherein the detectable material includes cholesteric characteristics that change their orientation based on thermal equilibrium with the surroundings and exhibit a different color that can be detected by the image sensor.

11. (Currently Amended) The method of claim 1 wherein step (a) includes (i) forming the surface ~~or the man-made structure~~ at a fixed location, and (ii) applying the detectable material, after forming the surface ~~or the man-made structure~~ at the fixed location.

12. (New) The method of claim 1 wherein the detectable material is separately provided on a road surface.